



## Featured Mission



### EYES ON SATURN

Saturn is the second biggest planet in our solar system. You can recognize it by its rings. Unlike Earth, Saturn is made of mostly liquids and gases. It is what astronomers call a gas giant. This summer the Cassini-Huygens spacecraft became the first manmade object to orbit Saturn. After a seven-

year journey, Cassini-Huygens reached Saturn in July. The mission is made up of two parts. Cassini will continue orbiting Saturn and will study the planet and its moons for the next four years. In December, the Huygens probe will separate from Cassini. It will reach the surface of Titan in January 2005 to study the moon more closely. Titan is the largest of Saturn's moons. It is bigger than our own moon. Titan is of special interest because it is the only moon in our solar system with its own atmosphere.

Cassini-Huygens is a joint effort by NASA and the European and Italian Space Agencies. The orbiter and probe are named for two astronomers who discovered and explained the nature of Saturn's rings in the 1600s. They were Christaan Huygens and Giovanni Cassini.

[saturn.jpl.nasa.gov/home/index.cfm](http://saturn.jpl.nasa.gov/home/index.cfm)

## Activity Corner

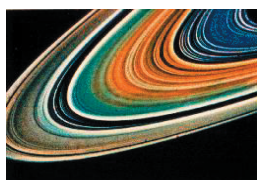
Turn your eyes toward the sky. Five planets will be easy to see in December. Saturn will be visible just after twilight this month. You can spot Mercury, Venus, Mars and Jupiter just before sunrise. Check out this website to help your search.

[www.dustbunny.com/afk/index.html](http://www.dustbunny.com/afk/index.html)

## Bytes and Bits

At the end of this month, NASA will launch the Deep Impact spacecraft on a mission to study the comet Tempel 1. In July 2005, the spacecraft will release a half-ton "impactor" to strike the comet. The impact will make a crater. This will let scientists study what is below the surface of a comet for the first time.

[deepimpact.jpl.nasa.gov](http://deepimpact.jpl.nasa.gov)



### NESN Puzzler

*Other than Saturn, what planets in our solar system have rings?*

The first ten correct answers will receive a NASA prize! Email us the name and address of your school with your answer. Last month's answer was Bessie Coleman. She was the first licensed African-American pilot.

## NASA Explorers are people like you

**Name:** Sandra A. Cauffman

**Education:** Master's Degree in Electrical, Electronic and Communication Engineering

**Job Title:** Deputy Project Manager



It takes years of hard work and planning to organize any NASA mission. Sandra Cauffman works on one of the teams planning and developing a satellite for the Geostationary Operational Environmental Satellite (GOES) program. GOES is a program run by NASA and the National Oceanic and Atmospheric Administration (NOAA). GOES satellites track weather and other natural conditions. Sandra's team is developing the GOES-R satellite. It is scheduled to launch in 2012. Sandra was born in Costa Rica. She always dreamed of working for NASA. She studied hard and even had to change universities to get a degree in electrical engineering. Her advice is to "never be afraid of change. Change made my dream come true." Sandra thinks the best part of her job is being part of a team developing a satellite that will help "protect life, property, and the nation's vital interests" and "enhance the global quality of life." In addition to her work, Sandra has two sons, ages nine and twelve. She loves reading and going on bike rides with her family.

## NES Spotlight

**Chugach School District**

**Students:** 214

**Teaching Staff:** 30

The Chugach School District is managed out of Anchorage, Alaska. It is made up of six schools. Three of the schools are in isolated areas of Prince William Sound. The other three are in Anchorage, Fairbanks and Valdez. The Chugach School District provides education services to students from preschool up to age 21. The district provides opportunities to learn in the classroom, at home and in the workplace. Half of the students are Alaska Natives. The majority of Chugach students live in remote villages only accessible by small plane or boat! The district established a Youth Area Watch (YAW) funded by the Exxon Valdez Oil Spill Trustees Council. YAW encourages students to conduct scientific research on the effects of the 1989 oil spill on their communities. The research also helps students better understand their coastal environment. Chugach is the smallest organization ever to receive the Malcolm Baldrige National Quality Award for performance excellence and quality achievement. The district's education model has been so successful that twelve other school districts are copying it. A big hurrah to the Chugach School District for all its great achievements!!

[www.chugachschools.com](http://www.chugachschools.com)



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